

SMOKE SIGNALS

For Radio Amateurs • By Radio Amateurs

Published Monthly Since 1969 • Our 31st Year

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21st Century Amateur Radio

By Richard Regent, K9GDF

Special guest David Sumner, K1ZZ, Executive Vice President of the American Radio Relay League and Publisher of *QST*, drew crowds of Hams to the Milwaukee Amateur Electronic Supply Superfest 2000 on April 8. Dave gave an encouraging and uplifting talk about his ten-year predictions of Amateur Radio, which he divided into several categories.

First is that Amateur Radio will not be personal radio any more, as it was in the years of two-meter phone patch activity. The cellphone technology is changing this area.

Second, encouraging technical activities and continuing technology education will be more important; this also aids in training newcomers for the electronics industry. There are many examples of licensed Radio Amateurs who themselves became electronic pioneers or who inspire and train workers to excel in electronics and other such endeavors. This will continue.

Third, Amateur Radio will be more useful in scientific investigation. Recently, hams helped with solar eclipse data gathering; since they are numerous, widely dispersed and willing to work with no pay or hire. Meteor scatter, weather spotting and meteorology will be handled more quickly.

Fourth, disaster communications will depend more on Amateur Radio communicators who have reliable equipment and practical skills. Commercial communications systems simply do not have economic incentives to make their equipment 100 percent reliable. So when cellphone capacity is exceeded, for example, folks must rely on radio amateurs. (At this point, N9UNR in the audience, noted that cellphone operating capacity is 8% of billing customers, but over a 15% use level most systems will break down.)

Fifth are personal achievement programs. Amateurs will continue to experiment and develop communications.

Sixth, Amateur Radio should be fun. Dave smiles and says, enjoy Amateur Radio, even though public relations is important, we must have fun when we can.

Mr. Sumner described a web-based message board where interested members can discuss the initial topics that should be included in an ARRL Certification Program for continuing education of amateurs. So far it was found that Emergency Communications was the top topic. Dave says that the Public Service aspect is vital and the Program with suitable topics should begin later this year.

K1ZZ told of an upcoming movie to hit the theaters screens titled "Frequency", a fictional story using Heath equipment to contact a relative of the past. "This is an opportunity to tell movie enthusiasts about Amateur Radio," Dave suggests, "that radio clubs have an official to contact theater management for approval, then set up a neat display table in the lobby to promote local level radio clubs." Handled properly, this could show the community that Amateur Radio activity is in their area.

Dave then answered a few questions from the audience which dealt with spread spectrum, FCC enforcement and the Official Observer program being useful for data gathering. The audience applauded Mr. Sumner for sharing his balanced views and knowledge. I remember Dave last being in the Milwaukee area in 1990 for a 10-10 Convention. It was wonderful to see and talk to him again. As Dave was leaving he waved. I said, "Thanks for coming to Wisconsin, Dave." We both smiled.

Willem's story puts family in media headlights

The van Tuijl family--Jacco, KH2TD, Jannie, KH2TE, and 13-year-old Willem--is getting its "15 minutes of fame." Their story has been featured in major newspapers and on national television. It's set to be highlighted again in *People* magazine (April 24 edition). While the story has been a public relations bonanza for Amateur Radio, the close and rather private van Tuijl family is not especially comfortable being in the spotlight.

Media attention built this week (April 10-14) with a segment on ABC's 20/20 news magazine.

The Wednesday night program recounted--in TV's typically compressed fashion--the events that led to the pirate attack on the family's sailboat off Honduras and Willem's dire injuries when he was shot by the intruders.

In addition to interviews with the parents, the ABC report included interviews with Ed Petzolt, K1LNC, and Dr Jim Hirschman, K4TCV, who assisted the van Tuijls via ham radio the night of March 28, and with ARRL President Jim Haynie, W5JBP, who arranged for Willem to come to the US for medical treatment. It also included audio segments provided by Frank Moorhus, AA2DR.

"We didn't want to do this at all," Jacco van Tuijl said of the ABC piece. But van Tuijl said the family was led to believe that ABC would mention the Willem Fund, and that softened their reluctance. The fund was established through Haynie's business office to assist the family in dealing with Willem's current and future expenses. "So we had the idea we were doing this for Willem, and they didn't do that, which disappointed me really."

For his part, Willem wasn't too excited

Willem fund

Donations are invited to the Willem Fund, c/o Southwest Bank, 1603 LBJ Freeway, Suite 100, Dallas, Texas 75234, 214-243-7900. (The Willem Fund is not an ARRL activity.)

The ARRL Letter

about being on national TV or about the magazine segment itself, his father said. Willem, he reported, considered the report a bit too melodramatic for his tastes. van Tuijl said he and his wife missed the broadcast because they got lost in Dallas. They saw it on tape later, and they agreed with their son's assessment.

van Tuijl returned to his sailboat in Honduras with the ABC crew to tape part of the segment. He says he stayed aboard the boat rather than in the hotel room ABC had reserved. "I was not ready to give a whole lot to this," he said. "They wanted to take the boat out sailing, and I just said, 'No, I'm just not going to do that.'"

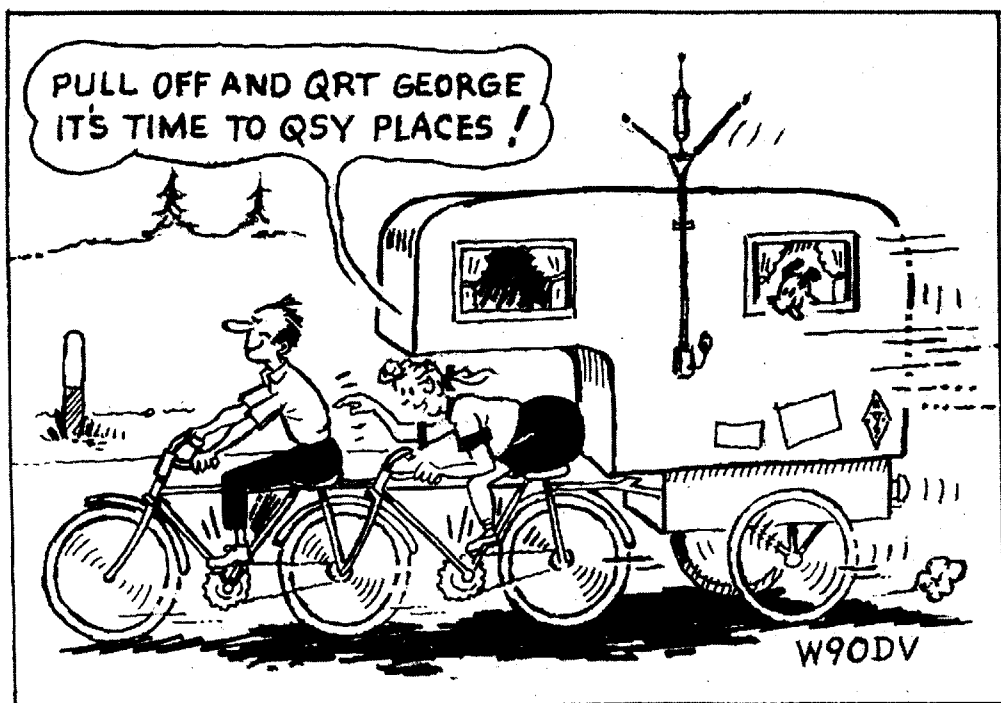
The story also appears on the 20/20 Web site at

http://www.abcnews.go.com/onair/2020/20_000412_pirates_feature.html.

The family's calamity also will be detailed in *Cruising World* magazine.

On Thursday (April 13), Willem--who suffered kidney and spinal cord damage in the shooting and likely will never be able to walk--was transferred from Children's Medical Center to a rehabilitation facility -- Our

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July 13, 2000 Apple Valley, MN
 July 15, 2000 Cottage Grove, MN
 July 15, 2000 Loves Park, IL
 July 15, 2000 Milwaukee, WI (BE)
 July 18, 2000 Eden Prairie, MN
 July 18, 2000 Sheboygan, WI
 July 22, 2000 Bloomington, MN
 July 29, 2000 Milwaukee, WI (MRAC)
 July 29, 2000 Tomahawk, WI
 September 09, 2000 Appleton, WI
 September 16, 2000 Onalaska, WI
 September 16, 2000 Sheboygan, WI
 November 04, 2000 Menomonie, WI
 November 04, 2000 Onalaska, WI
 November 05, 2000 Kaukauna, WI
 November 21, 2000 Sheboygan, WI
 January 27, 2001 Appleton, WI
 Monthly, 1st Sat. Racine, WI
 (except January, July & August)
 Monthly, 1st Sat. Oshkosh (Omro), WI
 Monthly, 1st Sat. St. Paul, MN
 Monthly, 2nd Thu. Apple Valley, MN
 Monthly, 2nd Sat. Madison, WI
 Monthly, 2nd Sat. Blaine, MN
 Monthly, 3rd Tue. Eden Prairie, MN
 Monthly, 3rd Sat. Milwaukee, WI (BE)
 Monthly, 3rd Sat. Loves Park, IL
 Monthly, 3rd Sat. Cottage Grove, MN
 Monthly, 4th Sat. Bloomington, MN
 Monthly, Last Sat. Milwaukee, WI (MRAC)
 (except December)
 Monthly, Last Sat. Tomahawk, WI
 (January thru October only)
 Quarterly Eau Claire, WI
 (Second Saturday Jan., Apr., & Oct.)
 plus annual summer hamfest.)

GENERAL RULES FOR MOST EXAMINATIONS

Attention exam groups: With recent restructuring and with the fee change which occurred on January 1, will you please look at the information about your group's sessions and verify that all is correct. There is an email link at the bottom of this page. Please send changes and corrections there. Restructuring will bring a lot of examinees to your sessions. It is your responsibility that the information given here is accurate, and your cooperation will be appreciated. Thanks!

Be sure to check with sponsors before going to an examination session. There may be changes and/or errors in the dates or information given. Some examinations require filing an FCC or NCVEC Form 605 and advance registration at least 30 days before the exam date. Some VE teams permit walk-ins. Check with the sponsor.

Many hamfests and swapfests offer examinations. A hamfest entrance fee should not be charged if you come only to attend the examination. To register in advance, you must get a copy of the current FCC Form 605, and fill it out completely and correctly. Get your form from the FCC as instructed below, or from the American Radio Relay League, 225 Main Street, Newington, CT 06111. Please send an SASE if you request a form from the League. FCC Field Offices seldom stock forms. You can also get a form from

<http://www.fcc.gov/formpage.html>
 or
<ftp://ftp.fcc.gov/pub/Forms/Form605>.

A form by FAX is available at (202) 418-0177 (request Form 000605). The FCC Forms Distribution Center will accept orders at (800) 418-3676. Form 605 has a main form, plus a Schedule D with two parts (for Vanity and Physician's Certifications). Forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$6.65 payable to "ARRL/VEC". Exam fees change annually. See QST, WIAW bulletins, or The ARRL Letter regarding any annual exam fee changes. Starting April 15, 2000, ARRL/VEC will no longer give a free code test or Element 2. (The FCC has announced that the maximum Amateur Radio examination fee reimbursement that Volunteer Examiners and Volunteer Examiner Coordinators can collect during calendar year 2000 is \$6.66. The ARRL/VEC has set its 2000 test fee at \$6.65. Per ARRL-VEC policy, there is no examination charge for those taking only Elements 1A or 2. A \$6.65 fee will be collected from applicants seeking to upgrade using a physician's certification to waive the Morse code examination. -- Bart J. Jahnke, W9JJ in The ARRL Letter)

FCC requires applicants to show their original amateur license or CSCE to the VE team. You must also have a good copy of your license or CSCE. A copy of your license or CSCE must be attached to your FCC form 605 and most VE teams need a copy for their records. One good CSCE copy is sufficient. You are also be required to have a

photo ID, or two other forms of ID. Contact the VE team for details.

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only, starting April 15. Proof must be either in the form of a pre-3/21/87 license document or a "Letter of Verification of Technician License Held Prior to 1987" as requested in writing from the FCC, 1270 Fairfield Road, Gettysburg, PA 17325-7245.

For those with internet access, a listing of exam sessions is available from:

<http://www.arrl.org/arrlvec/examsearch.phtml>

By checking this page, you can find registered VE sessions anywhere in US and some overseas. You can search by country, state or zip code. The listing is not specific to any particular VEC. It is a master database. Thanks to Bart Jahnke, W9JJ, ARRL/VEC

MILWAUKEE RADIO AMATEURS CLUB (MRAC/VEC) MILWAUKEE

Last Saturday, except June, July, and August, 9:30 a.m. to noon at Amateur Electronic Supply (AES), 5710 W. Good Hope Road, Milwaukee. For additional information, call (262) 797- MRAC. Bring along your original license, CSCE (if any), and one (1) good quality photocopy of each, plus two forms of identification, such a driver's license, etc. Also required is \$6.65 for the exam fee. Walk-ins are welcome. To register in advance, use a post card. Print the grade of license you are applying for, your name, address, and telephone number, and send the card to MRAC/VEC, Milwaukee Radio Amateurs Club, PO Box 25707, Milwaukee, WI 53225.

BADGER EXAMINERS (BE) - MILWAUKEE

Every third Saturday morning, 9:30 a.m. to noon, Badger Examiners group tests at AES (Amateur Electronic Supply) at 60th and Good Hope, Milwaukee. Exams are given at the old Serman Printing shop, just 300 feet west of the AES store. Novice to Extra are offered, and all test materials are provided. Fee is \$6.35, and bring your original license, or CSCE if needed.

Also available are Commercial license exams GROL (General Radiotelephone license), GMDSS, Telegraph, Etc. Fee is \$35.00. For more information call Gary Sharbuno, W19M at (414) 355-0237.

MADISON, WI

Every second Saturday morning at 8 a.m. VE exams are held in Madison. They are held at the operations building of the Madison Metropolitan Sewerage District at 1610 Moorland Rd. Directions: Take the Beltline (Hwy 12 and 18) to South Towne Drive. Go south 8/10 mile until South Towne Drive makes a bend and becomes Moorland Road and enter at gate. You should bring a picture ID, your original licence and a copy of your licence. For exams beyond the novice tests, bring a check for \$6.65, made out to the ARRL/VEC. If the special form with the medical exemption is required, contact me beforehand to obtain one. No appointments are necessary to take exams. For further questions, please leave a message on the mailbox or phone me (Tim Czerwinka, WO9U) at (608) 233- 9829. Email address is below.

MENOMONIE, WI

March 25 and November 4, 2000: The Menomonie area hams will conduct VE exams for all classes of licenses. The location will be the U.W.-Stout Communications Center, 820 South Broadway, Menomonie Wisconsin. Walk-ins only. Arrive between 9 and 11 a.m. For information, contact Jim Ley, NX9F, (715) 235-3998 (H), or (715) 232-1397 (W).

STEVENS POINT, WI - ARRL/VEC

March 25, 2000, 9 a.m. CST. All levels of amateur exams. Room A107 of the UWSP Science Building, on campus, corner of Fourth and Reserve Streets. For questions, directions, or further information, contact Joe Larson, N9JW, at 715- 344-1182 evenings or email to joel8@bigfoot.com. It's a golden opportunity to upgrade before the new rules take effect April 15. Joe Larson, N9JW

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August. Monthly exams are given 9 to 11 a.m. at the Faith United Methodist Church, 1013 Harmony Drive, Racine. Walk-ins are permitted. Talk in on 147.87/27. Inquiries and registrations should be directed to Robert N. Jensen, W0WLN, 5616 Cambridge lane #6, Racine, WI. Telephone (414) 886-8551.

TOMAHAWK, WI

Last Saturday of every month, Jan. thru Oct. Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No advance registration required, but appointment would be appreciated. Registration at 8:30 a.m. and testing starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Terry Collins, KB9AUP, W6564 Highway 8, Tomahawk, WI 54487. Telephone (715) 453-4633.

APPLETON, WI - ARRL/VEC MANITOWOC, WI (HAMFEST) KAUKAUNA, WI (HAMFEST)

Conducted by the Fox Cities ARC VE team. All regular test sessions are held at the American Red Cross Building in Appleton. Testing starting at 8 a.m. For Appleton information, contact George R. Croy, W9MDP, 2113 Twin Willows Drive, Appleton, WI 54914. (920) 730-0967. For Manitowoc or Kaukauna information, contact Larry Siebers, KD9IA (920) 759-1167.

OSHKOSH (OMRO)

The Oshkosh VE Team will administer Amateur Radio exams monthly on the first Saturday. Registration begins at 8:30 a.m. and exams will be given from 9 a.m. until noon at the Omro Community Center, 130 W. Larrabee, Omro, WI. Walk-ins welcomed. Bring a good quality photocopy of your original license and any other necessary documents such as a CSCE, etc. The first session will be through W5YI/VEC, and then sessions will alternate between ARRL/VEC and W5YI/VEC. The exam fee is \$6.65. For more information, please call Dick Lemme, K9FA, at (920) 235-0987, e-mail lemme@vbe.com, or write Dick at 826 Jefferson Street, Oshkosh, WI 54901.

EAU CLAIRE, WI

Saturday, June 10, at the Eau Claire Hamfest.

A session is tentatively set for October, but no date is firm yet. For more info: Steve Bluem, KA9OMY, (715) 839-6509 or email ka9omy@arri.net.

SHEBOYGAN, WI

SATURDAYS, May 20 and September 16: 8:30 a.m. registration, 9 a.m. testing.

TUESDAYS, March 21, July 18, and November 21: 6:30 p.m. registration, 7 p.m. testing.

All sessions will be held in the Red Cross building, 2023 Erie Avenue, in the main level classroom area. This testing site is handicapped/wheelchair accessible. Preregistration is appreciated so we don't get caught short of forms and examinations, but walk-ins are welcome. Contact: Art Pahr, K9XJ, N8029 Willow Road, Plymouth, WI 53073-2929. (920) 876-2370. K9XJ e-mail: k9xj@excel.net

ONALASKA, WI (ARRL/VEC)

May 6, September 16, November 4. The Riverland Amateur Radio Club will hold test sessions at the Onalaska Public Library, 741 Oak Avenue South. Registration begins at 9:00 a.m. Please bring two forms of identification and two copies of all original documents, CSCEs, license, etc. The site for this session ONLY will be the Onalaska Community Center. For more information contact: Roger Reader, KA9BKK, 526 13th Ave. N., Onalaska, WI 54650. (608) 783-0723.

MEDFORD, WI (ARRL/VEC)

Saturday, May 20. Sponsored by the Taylor County Area Amateur Radio Club. Testing for all classes. Novice through Extra. Registration starts 8:30 a.m., testing starts 9:00 a.m. Location: The community meeting/conference room in the lower level of the Sheriff's Department annex to the Taylor County Courthouse, corner of 2nd and Ogden Sts., Medford, WI. Take Ogden St. west off of Hwy. 13 to the courthouse. Park on the street or in the parking lot on the south side of the courthouse. Use one of the two entrances there. Watch for the signs when you get into the building. Talk-in on the 147.15 (+600 kHz. 114.8 PL) repeater. Walk-ins welcome, but if you know you'll be attending, please let us know. Contact: Tom Hrdina, N9GEN, 2373 Willow Ave., Medford, WI 54451. (715) 748-4054. E-mail: Mike, N9GHZ, muzikman@pcpros.net.

PEWAUKEE, WI (ARRL/VEC)

First Saturday in months school is in session. Exams held at Waukesha County Technical College Science Building. WCTC is on Highway JJ off Hwy 16 from the East I-94 and Hwy T from West I-94 just north of

(continued on page 10)

Amateur radio survives transition to restructuring

NEWINGTON, CT, April 20 - Despite dire predictions from some quarters, the "Big Day"--Saturday, April 15, 2000--dawned with nary a "10-4," a "roger beep" or "echo box" to be heard on the Amateur Bands. During the first weekend of restructuring, fledgling Generals and Extras were out in force on the HF bands, trying out their upgraded privileges and proudly appending the required "interim AG" or "interim AE" to each ID.

Amateur Radio has passed another milestone in its long history without incident. For the first time in more than 60 years, applicants for an Amateur Radio license seeking full HF privileges didn't need to take a 13 WPM or higher Morse code exam.

ARRL Hudson Division Director Frank Fallon, N2FF, was among those urging veteran hams to put out the welcome mat to all newcomers. "They will need to learn things that have never been part of any FCC test," he said in an open message published in the division newsletter, The Hudson Loop. Fallon advised experienced hams to be generous with their help, to be tolerant of mistakes and to be "friendly and tactful

when you offer suggestions for improvement."

Meanwhile, the ARRL-VEC team doesn't need any restructuring reminders. It's been dealing with an increased influx of applications for the past three months.

"You're a little early. It's taking about a month," Assistant to the ARRL-VEC Manager Wayne Irwin, W1KI, tells a newly upgraded caller whose new privileges have yet to show up in the FCC database or in his mailbox despite having tested March 22.

Irwin points out that VE teams have 10 days to get their paperwork into the mail or shipped to the ARRL-VEC. The 10 days does not include transit time to ARRL, which can be a week or more. The ARRL-VEC has an FCC-imposed 10-day deadline to check over the paperwork and send the files electronically to the FCC. But the volume of activity as a result of upgrade fever has put things behind the dime. Although it's hired on extra help, ARRL-VEC is still struggling to keep up. "The phones ring relentlessly with inquiries, and the e-mail runneth over," says ARRL-VEC Manager Bart Jahnke, W9JJ.

Over the weekend, thousands of hams took advantage of strategically scheduled upgrade and paperwork processing VE sessions, including some held at the stroke of midnight. Jahnke says he's gotten word of individual sessions with as many as 135 attendees. ARRL-VEC alone had nearly 250 separate sessions registered for April 15, so he's expecting an additional paperwork avalanche this week.

Nearly 90 applicants turned out for the Utica Shelby Emergency Communications Association's effort to be the first to offer amateur exams under the new rules. The club began administering tests at the stroke of midnight during its special VE session in Mt. Clemens, Michigan. Club spokesperson Paul Valko, W8KC, says the first one in the door was William "Captain Bill" Heaver, KB8QMP, who directs the Mt. Clemens Salvation Army center where the upgrades took place.

Among ARRL Headquarters staff members caught up in the restructuring upgrade wave are Penny Harts, N1NAG, Carole Dimock, N1NAM, and Mary Lau, N7IAL, who upgraded to General, and Mike Tracy, KC1SX, and John Bee, N1GNV who upgraded to Extra.

Perhaps as a point of pride, more than a few hams hustled in the weeks remaining before April 15 in an effort to upgrade under the old rules. One was ARRL Field

and Educational Services Manager Rosalie White, WA1STO. Another was Don Wenger, WD8OTT--now "interim AE"--who wrote ARRL HQ to say the League's code tapes did the trick for him after years of struggling with the code. "I hold nothing against a 5 WPM Extra, but for my own personal satisfaction I did it the 'old way,'" he wrote.

The ARRL Letter

Willem's story

Continued from front page

Children's House--at Baylor University. He could be there for two months.

"He's doing fine. He's recovering really quick," van Tuijl said. But he said Willem has not really come to grips with the long-term implications of his injuries. van Tuijl said the family's insurance covers Willem's medical expenses as long as he's still in the US. Those benefits will end if and when the family returns to The Netherlands, however.

In the meantime, van Tuijl said he expects to retrieve his sailboat--Hayat--from Honduras and sail it--with the help of a friend or two--to the US, probably Florida.

"Eventually, I think we have to go back to the Netherlands, but we also maybe would like to stay in the States," he said, framing the family's dilemma. He acknowledged the huge obstacles to remaining in the US, but he said the best rehab facilities and opportunities for his son are here.

"We just want the best for Willem," he said.

The ARRL Letter

EAU CLAIRE SWAPFEST 2000

Sponsored By The: Eau Claire Amateur Radio Club Inc.

Eau Claire County Exposition Center - Eau Claire, Wisconsin

194 to Eau Claire (Exit 68) Hwy 93, South on Hwy 93 1/8 Mile, then Right on Lorch Ave
FREE PARKING - Same Location As Last Year - Talk-In W9EAU 146.910 MHz Tone 110.9 Hz

Saturday, June 10, 2000

Doors Open To The Public at 8:30 AM

Vendor Setup Friday 5:00 PM to 9:00 PM - Saturday 6:00 AM

HAM GEAR - COMPUTERS

NEW & USED

INDIVIDUALS & DEALERS

DOOR PRIZES

FREE COFFEE

IF CAN'T FIND IT AT THE SWAPFEST
YOU PROBABLY DIDN'T NEED IT!

RAFFLE PRIZES

YAESU FT-2600M 60 Watt 2 Meter Transceiver

CANON BJC-1000 Color Inkjet Printer

PAPERPORT 3100 Flat Bed Page Scanner

OREGON SCIENTIFIC Weather Radios

BELLSOUTH 900 Mhz Cordless Phones

RADIO SHACK Digital Signal Processor

Many More Great Raffle Prizes

Raffle Tickets \$ 1.00 Each 6 for \$ 5.00

Raffle Prize Drawing 2:00PM - Need Not Be Present To Win

DELICIOUS FOOD

Brats - Hamburgers - Cheese Burgers - Hot Dogs

Sweet Rolls - Milk - Soda Pop

ARRL VE TESTING

9:00 AM to 12:00 PM

Walk-Ins Welcome

To take an examination, you must bring the following:

Photo ID or Two Forms of identification

Original & One (1) photocopy of any current amateur license or

Original & One (1) photocopy of your CSCE issued

by any VEC within 365 day preceding the test date

\$ 6.65 Examination Fee

Contact: Steve Bluem 715-839-6509 ka9omy@arrl.net

Ticket & Table Reservations

Admission Ticket Required to enter Display Area. Table & Tailgate Reservations Do Not Include Admission Ticket.
Tables are not reserved until full payment is received.

Name: _____ Call Sign: _____

Address: _____ City: _____

State: _____ Zip Code: _____ Phone: _____ Email: _____

Reservations Received & Paid

Before June 1, 2000

After June 1, 2000 & at the Door

Admission Ticket \$ 5.00 Qty _____ = \$ _____ \$ 6.00 Qty _____ = \$ _____

Raffle Tickets 6 for \$ 5.00 \$ 1.00 Qty _____ = \$ _____ \$ 1.00 Qty _____ = \$ _____

Flea Market Tables 8 ft x 2 1/2 ft \$ 10.00 Qty _____ = \$ _____ \$ 15.00 Qty _____ = \$ _____

Commercial Tables 8 ft x 2 1/2 ft \$ 15.00 Qty _____ = \$ _____ \$ 20.00 Qty _____ = \$ _____

Tailgate (No Table) 6 ft x 8 ft Area Outside \$ 10.00 Qty _____ = \$ _____ \$ 10.00 Qty _____ = \$ _____

Harmonics under age 12 admitted FREE

Total = \$ _____

Total = \$ _____

Make Check Payable To: ECARC Mail To: ECARC P.O. Box 1867 Eau Claire, WI 54702-1867

For More Information Contact: Jim Staatz KG9RA 715-838-9108 kg9ra@charter.net

Amateurs are in professional production

A new television program, produced by Dave Erickson, will be shown on Wisconsin Public Television Memorial Day at 8 p.m.

"Powder to the People" is the story of the three production runs of Badger Army Ammunition Plant near Baraboo, one of only two propellant-producing plants owned by the U.S. government. The program covers construction and operation for WWII, operation for the Korean War, and production for the Viet Nam war. The plant was nearly activated more recently for operation Desert Storm and has been upgraded since its most recent shutdown in 1975.

Many people are in the program and, they tell of their work at BAAP, which was originally called Badger Ordnance Works. It is, as producer Erickson says, really a story about people, not about the equipment (which, incidentally, is still quite functional).

Among those in the "cast" are Al Gallagher, WB9BPL, of Lodi, and Jim Romelfanger, K9ZZ, of Baraboo.

Video copies will be available.

Have you considered becoming an

ARRL VEC

ARRL Volunteer Examiner?

If you are 18 or older, and are presently a General, Advanced, or Extra class licensee, the ARRL/VEC would be glad to hear from you. Feel free to contact the ARRL/VEC at (800) 927-7583 and request our Prospective VE Packet. Very 73 to all my friends in Wisconsin!

Bart Jahnke, W9JJ/1, ARRL/VEC Manager

Manufacturers gather to meet future challenges

Representatives of the ARRL recently joined Amateur Radio equipment manufacturers and publishers for the second year in a row to share ideas and discuss issues facing the ham radio industry. The session was organized by Amateur Electronic Supply Manager Ray Grenier, K9KHW, and held at the Wisconsin hunting lodge of AES owner Phil Majerus.

Attending on behalf of the ARRL were ARRL Executive Vice President Dave Sumner, K1ZZ; ARRL Advertising Manager John Bee, N1GNV, and ARRL Marketing Coordinator Bob Inderbitzen, NQ1R.

Leading the discussions were Gordon West, WB6-NOA, of the Gordon West Radio School, and Bob Heil, K9EID, of Heil Sound Limited.

Sumner said much of the talk centered on ways to better support local efforts to attract new amateurs. "As all politics is local, so is the case here," Sumner said.

Antenna restrictions also were a hot topic at the manufacturers' meeting. "The group identified antenna

restrictions and especially restrictive covenants, as the greatest challenge facing ham radio at this point," Sumner said. He emphasized in his remarks to the group that antenna restrictions remain a priority issue for the League.

Sumner also acknowledged the extraordinary efforts of amateurs in recent emergencies, including the situation off Honduras where 13-year-old Willem van Tuijl was shot and seriously wounded when the family's sailboat was attacked by marauders.

Bee said the gathering was upbeat. "I thought there were a lot of positive thoughts expressed at the meeting," he said. He said manufacturers were more optimistic

about the business outlook than in the past, in part because of FCC license restructuring. The group also recognized the importance of expanding support to the many hams soon getting licensed or upgrading as a result of restructuring.

The manufacturers meeting was held in conjunction with the annual AES Superfest, April 7 and 8. Amateurs attending Superfest had a chance to meet with more than 36 manufacturers exhibiting at the AES store in Milwaukee. The event also included informational forums, license exams, and volunteers representing area radio clubs. AES Superfest 2000 was an ARRL-sanctioned event.

—Bob Inderbitzen, NQ1R,
contributed information for this story
Condensed from *The ARRL Letter*

Two more states move to codify PRB-1

New York

New York PRB-1 effort gets companion Senate bill: A companion PRB-1 bill, S.7324, has been introduced in the New York State Senate by Sen Dale M. Volker of Buffalo. The Senate measure mirrors the assembly bill. A.9947, submitted earlier. ARRL Hudson Director Frank Fallon, N2FF, urges amateurs to write their state senators and assembly representatives in support A.9947 and S.7324. Proponents are hoping for a hearing in the Local Government Committee. A directory of senators and representatives is available at

<http://www.assembly.state.ny.us>
and
<http://www.senate.state.ny.us>.

Sample letters and links to the state legislators are also accessible at <http://www.arrl-hudson.org>.

—Frank Fallon, N2FF, via The Hudson Loop

Rhode Island

Rhode Island PRB-1 bill in committee: The Rhode Island PRB-1 bill, S-2304, has been moved to the General Assembly's Corporation Committee. The amateur spearheading the bill, Hank Grilk, WA2-CCN, of Lincoln, is urging Ocean State amateurs to write their state senators and representatives urging support for the measure. The bill's sponsor, Sen Jonathan F. Oster, is stressing Amateur Radio's history of emergency communications. The bill, as submitted, has a minimum 50-foot tower height. Grilk is attempting to muster support for a 75-foot minimum. Rhode Island hams may contact Grilk at hgrilk@worldnet.att.net or write him at 1 West Butterfly Way, Lincoln, RI 02865.

The ARRL Letter

The Wisconsin legislature has adjourned and will not meet again until the next new session begins in 2001. This will be after the November election (obviously) but probably before redistricting happens as a result of the current census. There does appear to be some interest in another attempt to codify PRB-1 as Wisconsin law.

—K9ZZ



50 years of M&M

1949 marked the birth of the M&M Amateur Radio Club in Peshtigo. On its 50th birthday, the ARRL recognized that birthday with a special certificate. Here, Wisconsin Section Manager Don Michalski, W9IXG, left, presents that certificate to Jim Callow, K8IR, M&M's president.

Photo courtesy W9IXG

Technical Specialist

By Richard Regent, K9GDF

Would you like to receive three free ARRL publications: *RF Exposure and You*, the *ARRL Handbook* and the *RFI Handbook*? Do you have knowledge of Amateur Radio technology or radio frequency interference? If you're thinking, "Yes," then immediately consider volunteering as an ARRL Technical Specialist in Wisconsin. I'll give you ways to contact me at the end of this article.

Besides the free starter kit of valuable books, you'll also get guidelines, a few administrative forms, a TS certificate, and a print-out from the ARRL web site that describes the ARRL Technical Information Service in detail. The TIS program is a volunteer team of local technical wizards who can help others by answering questions or solving problems. For more information, check out www.arrl.org/tis to see the range of topics, then look at www.w9ixg.eboard.com for our list of Technical Specialists.

In the old days of radio we could write to ARRL Headquarters to get an answer for a technical question. You can still do that, but now the answers can come quickly from a Technical Specialist within the same ARRL section, Wisconsin. I think it's easier to solve a technical problem by having a local TS look at it, than it is to write to someone out east about it and hope for a useful reply.

Here are a few suggested duties that our Technical Specialists in Wisconsin now handle:

1. Serve as a technical advisor to local hams and

clubs. Correspond by telephone and letter on tech topic. Refer correspondents to other sources.

2. Serve as advisors in radio frequency interference issues and help local hams who need guidance.
3. Speak at local clubs on popular tech topics. Let local clubs know they're available and willing.
4. Represent ARRL at technical symposiums in industry; serve on CATV advisory committee; advise municipal governments on technical matters.
5. Work with ARRL officials and appointees when called upon for technical advice, especially in emergency communications situations where technical prowess is critical to get a communication system running.
6. Handle other miscellaneous technically-related tasks assigned by the Technical Coordinator.

The Technical Specialist is appointed by the Section Manager, W9IXG, or the Technical Coordinator, K9GDF, hey, that's me! An applicant must hold a Novice or higher class license and ARRL membership is required.

Send a list of your qualifications to: Richard Regent, K9GDF, 5003 South 26th Street, Milwaukee, WI 53221-3451

or e-mail regent@execpc.com.

Thanks for your help.

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MAY 2000

The Computer Corner

By Stan Kaplan, WB9RQR • 105 Martin Drive
Port Washington, WI 53074-9654
(262) 284-9346
skaplan@mcw.edu



No. 78: FIXDATE - A Free Utility

Among the "junk" computers I accumulated this winter were two that I just could not bear to recycle. One was a very fast (100 MHz) 486 (now doing service as my basement open-case test machine) and the other was a Pentium 75 MHz. Both are oldies but goodies, with one serious problem. Each time either one booted up, it they would show the correct time, and they both kept accurate track of the day and month. But the year defaulted to 2094! Of course, this is a Y2K bug in the BIOS chip, easily fixed by purchasing a new chip for each machine and popping them in. But, being a resourceful ham and not wanting to spend the \$40 + for each new chip, I decided to correct the problem with a fix-around. So I wrote a little PASCAL program that fixes the year. Here is what the program does, written in what programmers call "pseudocode" so anyone can understand it.

1. Hey Computer! Get the DOS date from the system clock (day, month, and year).
2. Write to the screen so your human master can see it:
"DOS date = day month year".
3. If the year is not 2000, then:

- a. Change it to 2000 in the system clock.
 - b. Write to the screen so your human master can see it:
"Year is being set to 2000".
4. If the year is 2000
 - a. Write to the screen so your human master can see it:
"No adjustment of the year is necessary".
 Your human master is done for now - go on doing what you were doing.

I put the little program (FIXDATE.EXE) in the root directory, and added a single word to the end of my AUTOEXEC.BAT file on a separate line:

Fixdate

Now, a purist would say, "Stan, you dummy, what happens next year when the date changes to 2001"? My simple answer is that I will modify the program on lines 3, 3a, 3b and 4, above to reflect the new year. A once-a-year task, and a good application of the KISS Principle!

Now, if you have the same problem with a computer, all you need do is let me know. I will send you a copy of the little program (4,624 bytes) and the source code (574 bytes), via snailmail on a floppy or right over the Internet if you are connected. The combined 5 kilobytes will download in a snap. If interested, you can view the source code (FIXDATE.PAS) with any text editor - Notepad will work fine. The source code contains the human-readable English commands that I wrote, using conventions of the PASCAL language. They are converted to binary (machine language) by the PASCAL compiler, and put into the EXE file. You can even open the EXE file with your text editor, if you desire, but all you will see are strange symbols with no meaning to any human being. To have any meaning at all, you would have to view this file with a utility that converts the machine language to hexadecimal code, and even then it would not mean much. We humans just don't think like computers (thank goodness). Happy computing!

Reprinted, by permission, from the ORC Newsletter, Ozaukee Radio Club (Ted Schweitzer, KB9RLI, Editor, 126 Lilac Ln., Belgium, WI 53004. <theo@execpc.com>).

Get the Net for Denny

By Richard Regent, K9GDF

Dennis Rybicki, K9LGU, looks like a tall Hollywood actor. He's wearing a long-sleeved white shirt and beige pants; his maroon tie decorated with gray paisleys is neatly held in place with a miniature Halli-crafter's S-32 radio tie pin. At first, I think Denny has glasses hanging around his neck with a chain. A closer look reveals that chain, the kind that fastens to a stopper in a stationary tub, has alligator clips at each end to hold his bright blue ARRL name and call badge. The badge also has engraved in it Official Relay Station, although he's the Section Traffic Manager (STM), an ARRL volunteer who handles all the details of the National Traffic System and formal message traffic operation in Wisconsin.

This evening K9LGU is presenting a program for the West Allis Radio Amateurs Club meeting titled "Traffic Nets and Message Handling".

With lights dimmed, the program begins with professional looking transparencies shown on a wall with a projector. We learn about nets, net control stations and handling traffic. Denny points out that Les Peterson, W9YCV, who is sitting in the front row of the audience, is one our most active traffic handlers, "That in this area, Les is more." After chuckling subsides Denny smoothly continues to describe the how and why of systems for message handling. "It is easy, good for you and Ham Radio. It can enhance the value of emergency communications, an important reason that

Amateur Radio exists," K9LGU remarks.

Denny is half way through the topic of the message and its parts, when suddenly it seems a wrong transparency is projected. In big red letters it reads, "Les, wake up!" The audience laughs as Denny frantically removes it and scurries to find the right one to continue the program. Of course everyone realizes that Les probably knows most of the traffic program anyway, even in his sleep.

We discover the weather reporting activities of traffic handling in Wisconsin and how the useful data is relayed to the Weather Bureau, then used, as examples, for flood prediction and determining irrigation limits. Just to keep us on our toes, Denny describes how to determine what the weather is doing by using a Weather Burro. You'll have to ask him for the burro details.

If you missed this informative program, parts of it are now posted at

<www.wna.eboard.com>

or check into any of the nets where the helpful folks will welcome you. Besides traffic nets like the Slow Speed Net, Denny compliments the WARAC for sponsoring the Wisconsin QSO Party, another great venue for training operators.

Mr. Rybicki is a retired English teacher and former Mayor of New Holstein and now operates the La Grange Bed and Breakfast Inn in Fort Atkinson with his wife Gerry as Innkeepers.

LES AND THE WHEELS



In this photo by Richard Regent, K9GDF, are three notables. At left is Hamtrix (West Allis Radio Amateur Club) editor Les Peterson, W9YCV. He's hobnobbing at Amateur Elec-

tronic Supply's Superfest with ARRL Executive Vice President David Sumner, K1ZZ (center) and ARRL Central Division Director Ed Metzger, W9PRN (right).

FCC to Generals: Advanced subbands are off limits

The FCC says a lot of newly upgraded General class licensees have begun asking if they may operate in the current Advanced class subbands now that the new amateur rules are in place. "The answer is: Absolutely not," said the Bill Cross, W3TN, of the FCC's Public Safety and Private Wireless Division. "No privileges changed for any license class."

Cross pointed out that the Advanced class license did not cease to exist under restructuring, which went into effect April 15, although the FCC no longer accepts applications for Novice or Advanced class licenses. He said current Generals do not earn Advanced class privileges until they upgrade to Amateur Extra class, at which point they earn both Advanced and Extra privileges.

The FCC also says General class operators may hold only Group C (1x3) or Group D (2x3) call signs, as it was under the old rules. Generals are not entitled to apply for or hold Group B (2x2) call signs under the new rules.

Cross cautioned newly upgraded licensees to check the revised Part 97 rules care-

fully to make sure they're not operating beyond their privileges. "Now that they've gotten the license, it's time to look at the real rules," he said.

Amateurs further are reminded that in order to apply for upgraded volunteer examiner privileges or for a vanity call sign reflecting new license status, a licensee first must have been issued an upgraded license grant by the FCC. Interim privileges conveyed by a Certificate of Successful Completion of Examination--or CSCE--are insufficient for these purposes.

Revised FCC Part 97 rules are available on the ARRL Web site at

<<http://www.arrl.org/field/regulations/news/part97/>>.

The FCC this week released the Errata to its December 30, 1999, Report and Order on restructuring. The Errata incorporate minor errors contained in the original R&O and already made in the version of the new rules that appeared in *The Federal Register* earlier this year.



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Bette Kratz, KF9ZU, Secretary
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WISCONSIN NETS

Net	WNA	Freq.	UTC	CDT	Manager
BWN	Yes	3985	1100	0600	W9RCW
BEN	Yes	3985	1700	1200	KE9VU
WSBN	Yes	3985	2230	1730	WB9WHQ
WNN	Yes	3723	2300	1800	KB9OCZ
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9UW
RCRA	No	01/61 (Mondays CDT)	0030 (Menomonee Area)	1930	KA9OMC
Gr. Bay	No	72/12 (Green Bay Area)	0245	2145	WB9NRK
ARES	No	4.65/5.25 (South East/South Central Wisconsin)	0200	2100	
RACES	No	3993.5	1400 (LSB Sunday)	0900	WA9OAY

Wisconsin Section Section Traffic Manager's Report March 2000

One of the highlights of March for me was the meeting of the Badger Weather Net members and the U. S. Weather Bureau personnel. A beautiful day in Wisconsin Rapids provided a great backdrop for an excellent meeting with all the right elements — superb food, great company, and a positive, short program of benefit to Ham Radio in Wisconsin. It was evident that the Amateur Radio fraternity was a valuable asset to the Weather Bureau, as their directors and staff spoke of how the data is collected and put to use in countless ways.

It was mentioned again that other states, Michigan most recently, have requested information on the workings of the BWN. A special award from the bureau to W9RCW was welcomed by the entire gathering in appreciation of Rick's tireless work with the BWN. ORS appointments were presented to AA9BB and N9UAR (W9IHW accepting for Bob). BPL cards were distributed to W9IHW, K9JPS, and K9GU. Special engraved BPL Medallions, a one-time special honor, were presented from ARRL HQ to Mike, K9GU and Lew, K9JPS. Everything about the meeting flowed smoothly — from the discussion with bureau reps to the door prizes for the ladies — thanks to the efforts of W9RCW and W9IHW.

Traffic and the weather go together. The daily reports really do make a difference. The severe weather and Skywarn nets are an integral part of the warning system here in our state. What does that mean for a traffic handler? It means we adapt. We learn the protocol for the weather net or for severe weather reporting just as we have learned formal message format for traffic flowing through the NTS. We listen even more carefully to the net control and we follow directions precisely. We use the standard ARES format of (1) Time of occurrence (2) Exact location (3) Severe weather event and (4) Source of the report if it's not the reporting station. We still speak at longhand dictation speed and use good diction. It works, because traffic is traffic.

Please mention traffic handling in your licensing classes and at club meetings. It's fun. It's good for you. And it's good for Ham Radio.

73, K9LGU, STM - Wisconsin

MONTHLY NET ACTIVITY SUMMARY March 2000

NET	QMI	QTC	QTR	SSNS	NM
BWN	1380	1749	2325	31	
				W9IHW for W9RCW	
BEN	496	76	714	29	KE9VU
WSBN	607	47	904	30	WB9WHQ

WNN	157	23	354	31	KB9ROB
WSSN	259	20	342	31	N9BDL
WIN/E	230	120	340	31	WB9ICH
WIN/L	204	60	312	31	W9UW

Totals 3333 2095 4991 214

STATION ACTIVITY SUMMARY (Showing traffic handling) March 2000

STATION	ORIG	RCVD	SENT	DLVD	TOTAL
K9JPS	0	438	43	427	908 BPL
W9RCW	0	364	4	362	730 BPL
W9IHW	0	310	59	255	624 BPL
W9PY	0	264	297	0	561 BPL
W9CBE	0	270	191	3	464
K9GU	0	214	32	212	458 BPL
WZ7V	0	192	32	192	416 BPL
N9TVT	0	95	312	2	409
N9CK	6	73	68	5	152
W9UW	0	74	49	0	123
K9FHI	0	29	86	0	115
W9YCV	2	37	54	11	104
K9LGU	0	72	27	2	101
N9KHD	0	47	41	10	98
N9BDL	0	31	56	2	89
K9RTB	0	22	51	2	75
KG9B	0	16	44	0	60
AG9G	0	8	50	0	58
KE9VU	0	21	32	0	53
WB9ICH	0	24	4	1	39
W9BHL	0	2	34	2	38
AA9BB	1	1	33	1	36
KB9ROB	0	30	4	1	35
WD9FLJ	3	12	13	3	31
KA9FVX	0	0	25	0	25
KB9QPM	0	5	19	0	24
W9ODV	0	0	21	0	21
KN9P	1	5	5	1	12
W9PVD	0	0	1	0	1

PUBLIC SERVICE HONOR ROLL SCORING

This listing is to recognize those amateurs whose versatile public service performance during the month noted above qualifies them for the necessary point totals for PSHR in the following eight categories.

1. Checking into a public service net, using any mode, one point each, maximum 60.
2. Performing as Net Control Station for a public service net, using any mode, three points each; maximum 24.
3. Performing assigned liaison between public service nets, three points each; maximum 24.
4. Delivering a formal message to a third party, one point each; no limit.
5. Originating a formal message from a 3rd party, one point each; no limit.
6. Serving as an ARRL field appointee or SM, 10 points each appointment; maximum 30.
7. Participating in a communications network for a public service event, 10 points each event; no limit.
8. Providing and maintaining an automated digital system that handles ARRL radiogram-formatted message traffic, 30 points.

Monthly qualifying total: 70 points

P S H R SUMMARY for March 2000

CALL	1	2	3	4	5	6	7	8	TL
K9JPS	41	24	0	427	1	10	0	0	503
W9RCW	45	0	0	362	0	30	0	0	437

Wisconsin Valley Radio Association

Kim Kunze, N9SDL, Secretary

P.O. Box 363 • Wausau, WI 54402

Six Meter Repeater: 51.19 Input/52.89 Output

Meeting Minutes April 3, 2000

Meeting was called to order by KB9DED. Members present: KB9FRB, KB9DZG, N9SDL, N9SDI, N9WPH, N9NRC, N9IAB, KB9VBR, N9LIA, KB9JMB, N9MEA, N9PHC, KB9STB, KB9OPQ, WA9NBC, W9WW, N9TTA, N9QQ, K9JPS, KC9NW.

The treasurer's report was approved by a motion from N9TTA and 2nd of N9LIA.

The secretary's report as printed in BSSS was approved by a motion from N9WPH and 2nd of W9WW.

Old Business

As of this date no information is available regarding the submitted grant proposal. It is on the agenda and is to be reviewed at the April meeting of the Wausau Foundation.

N9SDI is looking for volunteers for the Junior National kayak races to be held May 6th and 7th. Races start around 10:00 a.m. daily.

Field Day 2000 will be held Saturday, June 24th. It was discussed operating with emergency power this year. Jack, N9LIA, reported that the Camp Phillips site we usually use is previously

committed. We will have to find another site.

Jack, N9LIA, has been contacted in regard to participating in the Scout Camporee May 20th in Rhinelander. There was some discussion regarding the possibility that the Tomahawk Radio Club may be interested in doing this. It was discussed that the WVRA will participate. The WVRA will provide demonstrations of ham radio on Sat 1 p.m. - 5 p.m.

New Business

The big topic of this meeting was the election of new board members. With a motion from W9WW and 2nd from N9LIA to unanimously approve the list of nominees, the following were approved by members present: Don, W9WW; Kim, N9SDL; Mike, KB9DED; Mike, N9IAB; Mark, N9MEA; Mat, N9NMH; and Rich, N9WPH. At the next board meeting they will vote in the club officers from the new board members.

NTC has been reserved through August of 2000 for the WVRA Club meeting use.

Meeting adjourned with a motion from N9LIA and 2nd by N9TTA.

Respectfully submitted:
Kim Kunze, N9SDL



SHEBOYGAN County Amateur Radio Club

Sky Borkenhagen, N9XRU, Secretary
N6466 Plank Circle • Glenbeulah WI 53023

2-Meter Repeater: 147.06 Output

The April meeting of the Sheboygan County Amateur Radio Club was called to order by the club President, Steve, N9TRK, at 7:00 p.m. local time. There were 9 members present at the meeting.

The SCARC meetings are held every second Tuesday of the month in the Red Cross building at 2032 Erie Ave. in Sheboygan. The club treasurer Mike, K9SJ, gave the treasurer's report as being at \$350.00 at present. Member introductions followed.

Details and highlights of the Sheboygan County MS Walkathon event that took place on Sunday, April 9 were shared and expressed amongst members. Thanks to all who were able to help out and participate.

Steve, N9TRK, stated the Mancorad Radio Club has graciously invited SCARC members interested in working during the USS Cobia Event on the weekend of April 29-30 to contact Fred, W6BSF, other event details were given as well.

Steve, N9TRK, also handed out flyers for the upcoming Leukemia and Lymphoma Society's 8th annual Scenic Shore 150 Bike Tour, sched-

uled to come through Sheboygan County on Saturday, July 22nd, 2000. Club members interested in helping with communications during this event should contact Steve, N9TRK, via e-mail or after a Monday night net. Mike, K9SJ, expressed interest in riding in this year's event. Mike also emphasized that the ride is limited to the first 500 cyclists and the Early Bird registration deadline is May 22, 2000. All riding participants must raise a minimum of \$150.00 in donations and bring them to registration on July 22 at MATC North Campus in Mequon. This is where riding participants checking and the ride officially begins at 7:30 a.m. local time.

Plans for this year's Field Day event were also discussed. The Taylor Park site has been secured again for this year's event. Operators for this upcoming event are welcome and needed. Various time blocks and bands for operating are open, if interested contact Steve, N9TRK.

Yes, it's that time of year again! Forms were handed out for the 2000 - 2001 Nominations of the Sheboygan County Amateur Radio Club Ham

Please turn to page 8

K9FHI	60	24	24	0	0	10	10	30	158
WD9FLJ	52	0	24	3	3	20	20	30	152
K9RTB	60	12	15	2	0	30	0	30	149
W9YCV	60	24	24	11	2	20	0	0	141
N9BDL	60	24	24	2	0	30	0	0	140
W9CBE	60	24	24	3	0	20	0	0	131
K9LGU	60	15	24	2	0	20	0	0	121
N9TVT	60	24	24	2	0	10	0	0	120
AG9G	60	24	18	0	0	10	0	0	112
KA9FVX	60	3	0	0	0	10	0	0	73

Sheboygan County Amateur Radio Club

Continued from page 7

of the Year. Steve, N9TRK, is going to contact members not present at the meeting via shebham and telephone for their nominations. All nominations are to be turned in to Steve, N9TRK, by May 2nd, 2000. Nominations may be e-mailed to <N9TRK@arri.net>.

Also discussed was the possibility of changing the site for the 3rd Saturday morning Sheboygan Ham's breakfast due to the low turn out at the present location. A location more west in the County possibly the Plymouth area is being investigated.

After checking out the bench installed in the radio room area of the Red Cross basement, the meeting adjourned at 9:30 p.m.

Net Schedule

The SCARC 2 Meter net meets Monday nights at 8:00 p.m. local time on 147.060 PL 107.2+. This is a fun net, all are welcome. Any members willing to take the net control for one or more weeks, contact Steve, N9TRK.

The Saturday morning Sheboygan Ham's

breakfast is held at 8:00 a.m. in the following venues:

1st Saturdays - Jumes in Sheboygan
2nd Saturdays - Family Restaurant in Cleveland
3rd Saturdays - Jumping Jacks, Kohler Sports Core
4th Saturdays - Park View Restaurant in Sheboygan Falls
5th Saturdays - Hill Farm Restaurant, County V and OK

Hams, spouses, hangers-on and such are welcome. See the phone book for specific addresses and phone numbers.

Just a reminder, if you use e-mail, consider signing up on the Sheboygan Hams mailing list. Simply submit your e-mail address to:

<julian@bongo.tele.com>.

All e-mail sent to

<shebham@tele.com>

will be forwarded to all subscribers. Thanks, N6ARE, for providing this mail server for SCARC use!

Correspondence for the club should be mailed to: SCARC, P.O. Box 1282, Sheboygan, WI 53082-1282.

Quarter Century Wireless Association Southeastern Wisconsin Chapter 162

Larry McCalvy, WA9JMO
5400 Six Mile Road
Racine, WI 53402



With the spring weather much in evidence, 20 members and spouses gathered at the Summit Restaurant in Racine to celebrate our Chapter's 13th Anniversary on April 16th. The buffet was divine, the company unmatched and the conversation stimulating, as usual. In fact it was such a relaxing and wonderful outing, we did not want to spoil the day with club business; so we tabled it until the May meeting. That meeting will take place at the Meadows Restaurant in Franksville on Monday, May 15, 2000 beginning at 7 p.m.

Several members/spouses are a bit under the weather as I write this column. Bill Komistra, W9OVZ, is still not feeling that great but reports he is slowly gaining his strength back. Marie (Ed, N9NVK) Konicek is in the hospital with what was thought to be bruised ribs received in a fall that may turn out to be something else. Spence Clope, W9LDH, will be undergoing an exploratory procedure the last week in April. Fern Fisher had cataract surgery during the early part of April and reports she now has 20/20 vision in one of her eyes. We wish you all a speedy recovery with positive outcomes.

We are looking for great weather and a lot of club participation for our summer's upcoming

functions: The Great Mosquito Awareness Bash, and Field Day in June, and our annual picnic in August.

QCWA International Board of Directors is still mulling over our offer to host the 2001 International Convention on a cruise ship. The survey they ran in the Spring issue of the *Journal* netted some positive feedback and there are a number of board members advocating the venture. There are still 18 months remaining before that conference is scheduled to take place, but many time consuming details are yet to be worked out.

There are a number of community related communication projects that our members are involved with over the next few months. But as I will be out of town during the majority of them, I will report on what happen after the events. I am sure you will agree nothing is more important than DAYTON! Especially the 2000 HAM-VENTION! I am looking forward to giving a detailed picture filled report in the June *Smoke Signals* issue.

Dayton, here we come!!

73, Larry McCalvy, WA9JMO, President

Mancorad Radio Club

Theresa Hartlaub, KB9KXE,
Secretary

P.O. Box 204 • Manitowoc, WI
54221-0204



2-Meter Repeater: 146.01 Input/146.61 Output

MEETING MINUTES April 12, 2000

The April monthly meeting of the Mancorad Radio Club was called to order by President Fred (W6BSF) at 7:39 p.m.

March meeting minutes which were printed in the *Badger Smoke Signals* were approved by motions by Ken (K9HAG) and seconded by Red (N9GHE).

The monthly treasurer's report was given by Roger (W9NPX). Approved by motion made by Eric (AF9J), seconded by Carl, KA9ZTF.

Fred (W6BSF) mentioned a survey concerning the *Badger Smoke Signals*. The editors would like your feelings on continuing the monthly paper. Please take some time to let them know your likes and dislikes on this subject.

An update on the upcoming Hamfest was given and all seem to be coming together for another successful year. Many members have already signed up to help either on Friday and/or Saturday. This will be held on Saturday, March

13.

The Cobia sub event will be held on April 29-30. As reported in earlier minutes, all members are invited to participate in this. Fred (W6BSF) has contacted local newspapers and TV stations for coverage. Guidelines for participating were discussed and museum rules and regulations were given. A list of volunteers will be at the museum's main desk and all are required to check in there. Members from Sheboygan and Waterloo, IA will be participating.

On April 20 a weather spotter's class will be held. It begins at 7:00 at the Sheriff's Department. Participants are asked to meet in the parking lot, close to the courthouse. Let Fred (W6BSF) know if you plan to attend, if you have not already.

We are beginning the tornado season and local drills will be held in the near future.

A reminder for all those who wish to take the General theory class. The class will start on

Continued on page 9

RED CEDAR REPEATER ASSOCIATION, INC.

STEVE HART, KA9OMC, SECRETARY

E616 810TH AVENUE

KNAPP, WI 54749

2-Meter Repeater: 146.01 Input/146.61 Output

Greetings, RCRA sponsors and guests.

N9PPE, Jeff Cole, presented a spreadsheet program on his laptop computer at the March Social Hour that would do the adding and subtraction part of clerking the annual auction. Jeff has worked the clerking part of the auction for several years and recommends we use this in conjunction with the current clerking forms introduced to us by W9QAH, Bruce Walther. Our thanks to Jeff for his step saving work, and we look forward to putting his program to use.

N9FVA, Chuck Thomas at Menomonie, reports that he will be attending the 65th Signal Battalion reunion in Branson this August. Chick expects about 45 to attend.

KB9UZY, Ken Heintz, is studying the code and General theory. Ken also stays busy heading up some fun senior activities with the Institute for Learning in Retirement. Some of Ken's work includes planning day trips for about 40 people to see the Minnesota Landscape Arboretum and Science Museum of Minnesota.

K9IAC, Ken Drake at Menomonie, recently donated a Packard Bell computer system to the club for its use. Ken also provided some tutoring on use of the system. Many thanks to Ken!

WB9YMB, Jim Hilborn at Menomonie, recently donated a VCR to RCRA. Our thanks to Jim!

NX9F, Jim Ley, reports 28 for the Menomonie exams at UW-Stout.

The RCRA has been experiencing some system difficulties over the past few weeks. Some of the problem seems to revolve around the audio level coming and going. The backup was placed on air for a couple weeks and now a temporary fix to the voter card has allowed us to go back to the main system. We are still having voter switching problems but we expect to try to troubleshoot the problem on site with short off-air downtime. Components change value over time and lead to intermittent problems that don't always fail when we are there to look at them. Thanks for your patience.

Summer is time for antenna and tower projects. Remember to observe safety. Inspect the work area for buried cable (BSSS editor's note: If you plan to dig, call Diggers Hotline at least three days prior. If you do not and you damage a phone line - whatever - YOU pay for the repair, and it is NOT cheap), overhead lines, and try to work with another person. A recent visit to the main repeater site after severe icing reminded me that it is a good idea to wear a hard hat while working.

Remember that the RCRA has a very extensive library and can be a source for needed parts for your projects.

Steve Hart, KA9OMC
RCRA Secretary/Treasurer

Lakeshore Repeater Association

147.270 MHz • Racine, Wisconsin

Larry McCalvy, WA9JMO • 5400 Six Mile Road
Racine, WI 53402-9741
wa9jmo@wi.net

I am happy to report that the requested information on and about our repeaters as been compiled and sent to the requester - the Wisconsin Association of Repeaters organization. Our dues has been brought up to date, and the request to move our 70cm system from the temporary location at the Kenosha Explorer Post to just inside the Racine County Line has been granted. Your Board of Directors is currently working out all the details associated with this move and with luck, we should be operational during the month of June. The cost involved with this move is not fully known as of this writing, but it has prompted your board to delay any other non-emergency expenses until our 70-cm system is up and in fully order.

For reasons unknown to the club officers, dues paying member have declined. There are several individuals using our system on a regular basis that feel they do not have to financially support the repeater. With this membership decline your Board does not want to engage in multifaceted financial projects with the 70-cm cost still not known. We do not want to increase the repeater dues. Any changes to our current two-meter system will not take place until we have completed installation on the 440 MHz machine. Further clarification and greater details will be given as your board becomes aware of

them.

Our July meeting will be held at the Red Cross Building on Tuesday, July 25, 2000, beginning at 7:30 p.m. The October meeting will also be held at the Red Cross Building on the 4th Tuesday, October 24, 2000.

I would like to personally thank our Audit Committee, Steve Brown, KC5GWN; Tammy Gardner, KB9SXI; and Paul Smedegaard, N9RGW, for their time, commitment, and expertise as they scoured our financial books looking for discrepancies. I am happy to report they found the books in good order. The detailed record keeping employed by our current Treasurer, Bob Jensen, W0WLN, I was told, made the Audit Committee's task fairly easy. Thanks, Bob!

To make the transition from one board member to the next as the current board membership changes over the years, your club officers are drafting a set of Standing Rules (rules to handle the day to day activities not specifically covered in our Constitution and By-Laws). When completed, the membership will vote to use these rules or change them if needed, at the beginning of each year. It is hoped that these rules will make the new officers' tasks less cumbersome at the beginning of their term.

73, Larry McCalvy, WA9JMO, President

Large Magazine Collection Offered Free

My collection of QSTs from February, 1938 to December 1999 is available free to whoever would like it. The collection also includes old ARRL License Manuals, Hints and Kinks, Antenna Manuals, and miscellaneous CQ magazines. Everything is cataloged and in corrugated cartons. You pick up. Paul Ripple, W9SIZ, 262/334-3032. Email: cw80@juno.com.

Mancorad Radio Club

Continued from page 8

April 24 and continue April 26, May 1, 3, and 8. Along with the class, a video presentation will be given and a listing of the new question pool will be given. Participants should be ready for the test given on Saturday, May 13 at Silver Lake College. John (NZ9Z), Roger (WA9NPX), and Eric (AF9J) will teach.

As reported in last month's meeting, Fred (W6BSF) was working on getting club jackets. He has gotten his and showed it to all at the meeting. They are lightweight, blue in color, with the club's logo on the back, and club name and member name on the front. Each member interested in getting one should order their own. T-shirts and sweatshirts can also be done.

It was reported that a tower will be constructed on the northwest side of Manitowoc at Evergreen Cemetery. It will be 160 feet. A discussion followed.

Upcoming hamfests and other events were mentioned.

Club member John (NZ9Z) and his wife, Cindy, are over in Sri Lanka visiting a friend and fellow ham, Victor. They have set up equipment and are on the air. John will be back in time to

teach the theory class. We all anticipate a very interesting report given by John at a future ham meeting.

Flyers from upcoming hamfests were shown for anyone interested in attending other hamfests.

Our monthly prize drawing was held. Dave (N9ANP) was not in attendance and the prize will go to \$6.00.

Ken (K9HAG) and Mary (KB9GOY) provided a very tasty lunch, enjoyed by all. Thank you!

The meeting was adjourned at 8:31 with a motion by Vic (WB9VYO) and seconded by Carl (WA9WYK).

MEMBER ATTENDANCE

Fred - W6BSF
Theresa - KB9KXE
Dan - N9FVZ
Bob - KB9INK
Don - KB9NTL
Ken - K9HAG
Vic - WB9VYO
Chuck - N9WUN
Glen - AA9MT
Bill - K9DUX
Larry - K9LWI
Roger - W9NPX

Carl - KA9WYK
Dick - N9QFY
Carl - KA9ZTF
Mary - KB9GOY
Gene - KB9KXF
Paul - AA9WI
Eric - AF9J
Denise - N4WKG
Red - N9GHE
Ken - WD9ERO

□

Florida hams meet with Spectrum Protection Act sponsor

Members of the West Central Florida Section leadership met with US Rep. Michael Bilirakis (R-Clearwater) April 15 to discuss the future of Amateur Radio and the impact of federal regulation. Rep. Bilirakis is the author and chief sponsor of HR 783, the Amateur Radio Spectrum Protection Act. The bill, currently under consideration by a House Committee, would require the FCC to allocate comparable radio spectrum to the Amateur Radio Service in exchange for any current allocations the Commission may decide to auction off or reallocate to another service. Rep. Bilirakis commended Amateur Radio operators for their continued commitment to public service in their communities.

He cited the role Amateur Radio played in the recent rescue of Willem van Tuijl, shot and seriously injured when his family's sailboat was attacked by pirates off the coast of Honduras. "This was Amateur Radio at

its finest," Bilirakis told the group.

West Central Florida Section Manager Dave Armbrust, AE4MR, outlined the growing concern about the impact of deed restrictions and restrictive covenants on Amateur Radio. "We must find a way to give these operators and those who wish to become hams the opportunity to perform public service and emergency communications unimpaired by these artificial barriers," he said.

The ARRL has petitioned the FCC to expand the scope of PRB-1 to include restrictive covenants. ARRL Southeastern Division Assistant Director Paul Toth, NA4-AR, called on Bilirakis to support that change. The meeting was hosted by the Lighthouse Amateur Radio Club.

The ARRL Letter

The Racine Megacycle Club



Club Station W9UDU • Racine, WI
Don Parkinson, KB9HAM, Secretary
c/o RMC • P.O. Box 3 • Racine, WI 54301-0003
e-mail: w9udu@wi.net

Web: <http://www2.wi.net/~hamradio/>
Voice mail: (414) 552-6RMC • ARRL Affiliated
Providing communications for American Red Cross and ARES

The Racine Megacycle Club opened their meeting on April 10th at 7:30 p.m. at the Gateway Technical College. President Bob Burgermeister, W9EH, opened the meeting by welcoming Boy Scout Troop 142, the first of two meetings that they will attend. As usual, everyone introduced himself or herself, including our guests with their name and call sign if they have one. Among the scouts there was one who spoke up who had a license, Erik Goebel, KB9KTZ.

The president announced that we would have a very brief business meeting. The secretary report was read, approved by Kenny Kuchar, N9WHR, and seconded by Greg Holding, KB9-RMA.

The treasurer's report of the quarterly report was read and approved by a motion by Kenny, N9WHR, and seconded by Mathew Weeks, KB9ULU.

Old Business

We have reduced the number of voice mail boxes to 1. Updates were added to the Website since our last meeting and we thank Rees Roberts, K9UUT, for his efforts. Field Day Plans will be at the Red Cross Building. Kenny, N9-WHR, raised the question whether or not we will be using the generator on Field Day. The president mentioned that we have that option if we intend to do so.

New Business

Phil, KC9IS, mentioned that Mt. Pleasant Fire Department and Police Department, along with the Red Cross, will be having a Safety Fair at the Regency Mall on Saturday, May 20th. Two stations will be set up. One will be in the mall and the other outside in a mobile home. Phil has 5 volunteers right now and asked for those present that they would volunteer their time by signing up.

Programs for the rest of the year have been outlined. Rees Roberts (Activity Chair Person), K9UUT, has worked very diligently to line up

those activities.

Next month, May, the club will invite Badger Contesters to be the presenter. June, we will have a regular meeting at the Red Cross building early in the month and the activity of Field Day later in the month.

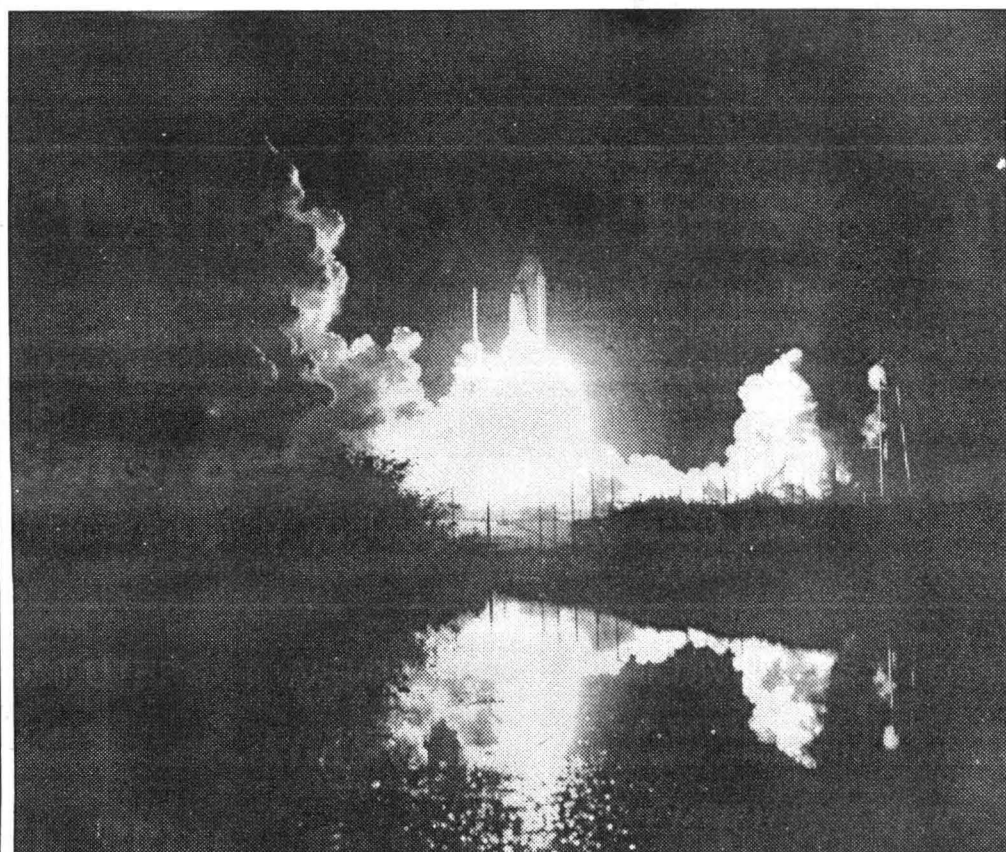
"Down the Road", the club will have the privilege of having a tentative presentation by a fellow-RMC member (to be announced) of sharing his experience and knowledge of QSLing and DXing. August is our annual picnic. And of course, the club will keep you posted on upcoming activities.

Motion was called by Kenny, N9WHR, to close the business meeting and seconded by Greg Holding, KB9RMA. The motion was carried and the time was given to Rees Roberts, K9UUT, who gave an excellent presentation to our guests, BSA Troop 142. Rees shared with the Boy Scouts definitions and demonstrations of Amateur Radio through the maximum access of the multi-media peripheral that this facility offered. Rees also shared with the group the RMC website: <www.w9udu.org>.

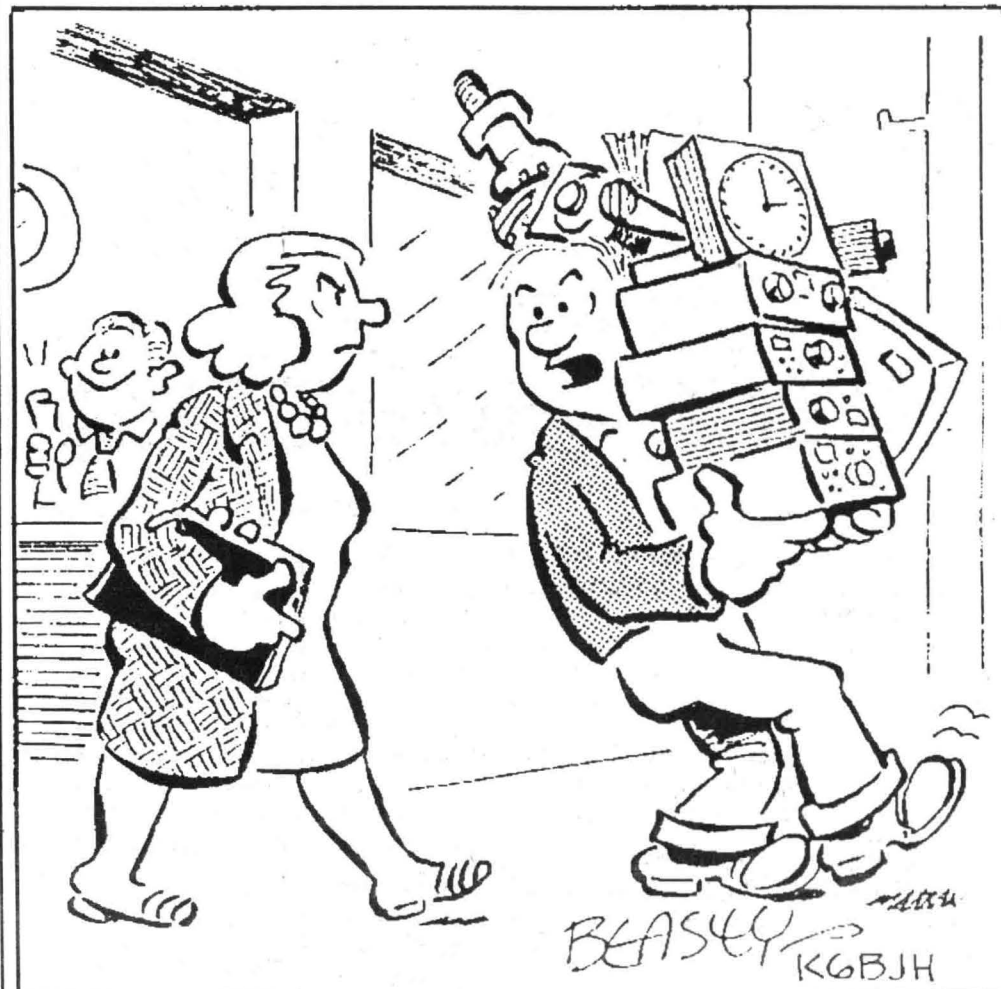
Patrick Weeks, KB9ULT/AE, was introduced as one of the latest Amateur Extra Class recipients in the club. Congratulations go out to him by the club by applause. Rees personally presented a door prize of a 13-element beam that he won at Amateur Electronic Supply at their last Super Fest and presented the 2 meter antenna to Patrick because he was the one who brought it to his attention at AES Super Fest.

After the demonstration, the boy scouts were broken up into 4 groups with 4 licensed hams in the building and 4 licensed volunteers outside. Each scout had the opportunity to communicate and receive a QSL card of contacting a mobile station in qualifying one of the requirements in scouting. As the night wound down, some parents were contacting their scouts inside. It was a fun activity and we owe the success to Rees' time and preparation and the talents of our club members in hosting our guests in such an activity. The meeting adjourned and some united themselves at Reflections for dessert. □

Bright Light in the Night



This NASA photo is of the night launch of shuttle mission STS-76. It is Atlantis, heading to a rendezvous in space with Mir. The launch was March 22, 1996. It carried, among the rest of the crew, Astronaut Shannon Lucid, who spent five or so months on Mir.



I HATE TO JUST WALK OUT OF A RADIO STORE WITHOUT BUYING SOMETHING?

Thank you to all of the volunteer writers, cartoonists and photographers whose work you read every month here in Badger State Smoke Signals.



THE WISCONSIN PACKETEER

Wisconsin Amateur Packet Radio Association
Allen Schnepf, NØGMJ, Treasurer
Ogema, WI 54459

Andy Nemec, KB9ALN, Editor • 453 Cottage Grove Avenue • Green Bay, WI 54304 • e-mail: kb9aln@juno.com

WAPR News - May, 2000

by Andy Nemec, KB9ALN

May marks the unmistakable march toward warmer weather and after being teased several times, we in Wisconsin are all the more anxious to greet summer. Let's hope we don't usher in summer with one of the signs of the season, severe weather.

Which brings us to one topic in the news, using packet in your weather spotting program and other emergency operations. Is your station ready to go for the first big event? Have you checked out your antennas lately, how did they fare over winter? Weather offices in Sullivan and Green Bay both accept packet reports. Packet can be an effective tool for accepting supplemental and even more critical reports in those instances when the net control is en route to the NWS office, but has not arrived yet. Generally, operators that conduct net operations do so from the district National Weather Service office and get plenty of advance notice of a coming severe weather event. However, sometimes Mother Nature catches even the most capable forecasters by surprise. In the event that ample notice is not possible, packet can be very useful for accepting reports of severe weather and the damage it causes.

I am interested to hear if other weather offices in the state are utilizing packet radio in their operations, and how it is being used. Procedures almost certainly will vary between offices, so I would like to devote some space in a coming Wisconsin Packeteer page to inform amateur packet operators of these procedures. This will give operators who may not normally interact with your program some knowledge of how it works, should it become necessary. The sharing of ideas between different spotting groups may also give us some ideas on how to utilize packet in severe weather spotting operations.

So if you are using packet at your local NWS office, please let me know. Also let me know what the proper procedures are, and what limitations and conditions you impose on your packet operations. You can use packet mail, E-Mail or regular U.S. postal mail to contact me. I and your fellow packet operators will be glad you did.

On to other news - news that almost isn't. I reported last month that we were going to have a WAPR meeting at the Madison Swapfest. As it turns out, not enough of the board members were able to make the meeting, so it suffered the fate of a late cancellation. Naturally, we were unable to spread the word about the cancellation as it came too late. We apologize to anyone who was planning on attending, or tried to attend.

However, we can discuss some of the business that was to have been discussed at that meeting. We're in the process of putting that together now, and will have it ready for next month, and will solicit your comments on what we present at that time.

For this month, we'll continue our discussion of the AX.25 protocol, the protocol that powers amateur packet radio.

As always, you can forward your packet news to me by one of the addresses at the top of the page. I'm always interested in hearing what is going on in packet radio in all parts of the state.

That's all for news this month. Until next time, 73 from Andy.

AX.25 and Packet Radio - Part 3

by Andy Nemec, KB9ALN

In part two of our series, we covered quite a bit of ground discussing how packet radio actually works, with the basics. We talked about what Data is, how it is grouped, and how it is represented to a computer. Computers see voltage transitions as Data, and in radio, we use a modem to generate tones that represent these voltage transitions.

We also touched on the need for the sending and receiving computers to be synchronized in some manner, so that they are both expecting the same thing to happen at the same time. Plain letters and numbers, along with some symbols and graphics characters, are represented by the American Standard Code for Information Interchange - ASCII.

Now we will continue our discussion of just what a packet is, what kinds of packets are specified in the AX.25 protocol, and the packets used for control of a packet communications link.

What is a Packet?

A Packet can be compared to an regular postal envelope containing a letter. It is limited to a maximum size and has certain addressing, and has to conform to certain standards if it is to reach it's destination properly.

What the envelope does is serve as a container for your letter. The letter itself can be compared to Data - the information we want the envelope, the packet, to carry for us.

What a packet really becomes is an electronic envelope that contains information we want to convey to someone else. Not only is it a container, but it also has a recipient address, and a return address from the sender. The letter is our data.

Types of Packets.

Now that we know what a packet is, we can discuss the different types of packets. While we have compared a packet to an envelope, we might consider different type of packets as different colors of envelopes, with each color signifying some event or operating condition. Let's take our example a little further by saying that these colored envelopes can save us time and let the sender know that the recipient has, or has not, received the last packet.

Let's say that a red envelope sent means the sender wants to send additional information, a letter. Let's say a green envelope sent back by our recipient indicates it is OK to do so. A black envelope means that the recipient is too

busy to read the letter that is proposed.

Let's say that the message we intend to send will come in several parts, each in it's own envelope, or packet. Each of these envelopes is colored blue, indicating that the envelope has a letter containing a portion of the message. In addition to the blue-colored envelope, each letter is numbered so that the entire message can be reassembled in the proper sequence.

Let's also say that the recipient acknowledges the receipt of each envelope by sending a corresponding yellow envelope back to the sender, but the letter only contains a number of the next expected message.

Now when the sender and recipient are ready to end the communication, one will send a brown envelope to the other, and it is acknowledged by another brown envelope. This ends our communication.

Packet radio uses all of these mechanisms (and a few more) in electronic form to make certain all of the pieces of a communication arrive and are reassembled in the correct order. The red envelope is a "connect request" packet. The green envelope is a "Connect acknowledgement", while the black envelope is a "Busy", connection denied packet. These are considered special packets that signal the status of the communications link, also called "Link Control" or "Supervisory" packets.

Packets containing information are represented by the Blue envelopes, and are called just that - Information packets. Yellow envelopes represent a supervisory acknowledgement packet. Brown envelopes also represent a link-control supervisory packet.

And this represents a broad classification of the different types of packets; Link Control, Link supervising and Informational.

Specific Packet Types

When you attempt to connect your packet station to another, it sends out a SABM packet. This means "Set Asynchronous Balanced Mode". Remember that we use the asynchronous mode to transfer data, because we cannot rely on a single source of synchronization for all of the computers that connect to each other.

WISCONSIN AMATEUR PACKET RADIO MEMBERSHIP APPLICATION

PLEASE PRINT

NAME: _____ CALL: _____ HOME PHONE: (____) _____

ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____

HOME BBS: _____ FREQ. _____ (Listing your home BBS is important)

Your HOME BBS should be a full service BBS, not your TNC's mailbox.

MY PACKET STATION OPERATES: _____ DAY _____ NIGHT _____ 24HRS

I OPERATE A: _____ DIGIPEATER WITH ALIAS OF: _____

_____ FULL SERVICE BBS

PRIMARY _____ PACKETINTEREST/EXPERTISE IS: _____

YES I want to receive Badger State Smoke Signals and I understand that part of my dues goes to pay this subscription. cost \$20.00

When the request to connect is received, there are 3 possible responses. Assuming that all is OK and a connect is possible, the Unnumbered Acknowledgement "UA" packet is sent. If the computer or TNC is already busy with a connection and only allows one connect at a time, it sends a "DM" packet, representing the "Disconnected Mode".

The third possible response to a connect request is seldom seen - the "Frame Reject". This response means that an error in decoding the connect request was made. This can be due to noise disrupting the decoding, or two TNCs with the same MYCALL responding to the same connect request at almost exactly the same time.

Once a connect request is acknowledged with the UA packet and all is well, Information transfer can begin. Each packet of information, oddly enough called an "I" packet, can contain a maximum of 256 bytes. Each information packet is numbered, so it can be sequenced with others. This allows information originally sent in separate packets to be put back in the proper order.

After each information packet is successfully decoded, another type of packet is sent. This is an "Numbered Acknowledgement". This is the packet number of the next expected information packet. Note when we made a connect request, we received an "Unnumbered Acknowledgement" packet. This is because we had not established a link, and had not begun transferring information yet.

When a disconnection is needed, a DISC packet is sent. It is acknowledged in by a "DM" packet, and sometimes an additional "UA" packet is sent to verify that the connection has been severed.

Beacon and UI Packets

There is one group of packets sent out that is unique, the "UI" packet. This is an "Unnumbered Information" packet that can be addressed to any call-sign, or no call-sign in particular. You'll see this as a "UI", "CQ" or "Beacon" packet, and it is not acknowledged as having been received. This type of packet is used for beaconing, calling CQ, "Round-Table" chats, and APRS.

UI packets also allow us to send other types of communications protocols, such as Flexnet, ROSE, and TCP/IP. These, unlike the packets used for beaconing, are addressed to a particular call-sign. It's likely that the recipient will send another UI packet in response, which will contain control information for the special protocol used.

Poll Packets

> From time to time, the link between two computers or TNCs is checked to make sure that both ends of the link are still operating. A special kind of packet is used for that, called a "Poll" packet. A timer dictates when a poll packet is to be sent, and it is acknowledged with a numbered acknowledgement packet.

Summary

Packets are really carriers of information, much like an envelope used to carry a letter. Each packet has an address for the recipient and the sender.

When information is to be transferred, a link is set up through the use of SABM and UA packets. Information packets are numbered and acknowledged in a numbered sequence. A DISC packet is sent when a disconnection is desired, and it is acknowledged with a DISC and/or a UA packet.

The exception to this is the UI packet. It is not numbered and generally not acknowledged. It can be addressed to anyone in particular, or no one in particular (such as Beacon, CQ, and APRS packets).

Poll packets are used to periodically check the communications link, and are acknowledged with Numbered packets.

That's all we have space for this time. Until next time, 73 from Andy.

THE TEST POINT

(continued from page 3)

GE Medical Systems. Handicapped parking is at the rear of the building. Tests start at 9 a.m. and registration ends at 10 a.m. Contact: Al Johnson, AA7CS, (920) 568-0836, email aa7cs@arrl.net; Roger Bradley, AA9OJ, (262) 691-3089 or SEWFARS Repeater club c/o Jam Lazachek, KF9GG (262) 650-0724.



Yellow Thunder Amateur Radio Club

WB9FDZ (Original Club Call)
K9ODK (Robert L. Prine Memorial Call)

Leonard Wagner, N9XJG, Secretary
E10262 Hootowl Drive • Baraboo, WI 53913



Steve Schulze, Club President, called the April 4, 2000 meeting of the Yellow Thunder Amateur Club, Inc. to order at 7:42 P.M. The minutes of the March meeting were accepted as published in Smoke Signals and the members e-mail. A treasurers report was given by Bill Klinkner he reports that we have money, but there are only 18 paid members for this year at this time. If you fall into the unpaid category please contact Bill!

OLD BUSINESS: A new insurance company will be covering our club this year with the same coverage and a \$150 per year saving over last year.

Steve has heard nothing from the March of Dimes people so we assume they do not need our services for the March of Dimes Walk America on April 29th.

Steve also reported on the first 2 Sunday nets on the Yellow Thunder repeater. On 3-26 there was 3 check ins and on 4-2 there was 6. As the word gets out there should be many more. If you haven't yet, tune to the 147.315 (PL 123) repeater at 8 P.M. Sunday night, check in and listen to the ARRL Audio News. There has also been very good reports on the repeaters range and audio quality.

NEW BUSINESS: We will have some info sheets on the repeater and the Sunday night net printed to hand out with the swapfest fliers at the MARA hamfest and AES Superfest.

If you have something that you want to sell on the YTARC table at the MARA swapfest please tag it with your name and call and please help man the table for part of

the morning on April 9th, the doors open at 8 A.M.

Help is needed for the March of Dimes Walk America May 6th. and the Madison Marathon May 28th. both in Madison. Contact Tom Fleming N9SZF

Pete Sweeney has brochures from the tornado spotters meeting; if you would like them please contact him.

There will be a CLUB WORK DAY on April 29th on the roof of the Sauk County Court House (EOC), installing 2 antennas and 2 feed lines, if you can help please contact Pete WD9JIB he needs 5 or 6 good helpers.

April 13th is the statewide tornado drill, check your local paper and check into your local SKYWARN Net.

MAY MEETING: May 2, 2000 FOX HUNT!! 6:30 P.M. in the parking lot behind the Baraboo Civic Center. Meeting to follow.

Meeting adjourned at 8:45 P.M.

The following members and guests were present at the meeting.

Art Kleefisch	W9WSS	Baraboo
Steve Schulze	W9UDO	Baraboo
Patrick Klinkner		Sauk City
Bill Klinkner	N9KXX	Sauk City
Peter Sweeney	WD9JIB	Reedsburg
Jim Paul	N9LKY	Baraboo
Tom Harrison	N9PQJ	Reedsburg

HUDSON, WI (ARRL/VEC)

Sponsor: St. Croix Valley AR Testing Col. Time: Call for time and walk-in info, Contact: Gregory Miller (715)386-9857 Location: St. Croix County Emergency, Government Center by jail, Carmichael Rd. lower level, Hudson, WI 54016. (Information tnx ARRL Web site)

FRIENDSHIP, WI (ARRL/VEC)

Sponsor: Adams County ARC. Location: Adams-Columbia electric Cooperative (Community Room), 410 E. Lake St., Friendship, WI 53934. Contact: Karl Simonson, KB9EQI, (608) 565-6533. kb9eqi@iname.com

HAMFEST EXAMS

Cedarburg WI - ORC Hamfest
Eau Claire WI - ECARC Hamfest
Green Bay WI - ARES Hamfest
Hayward WI - Hayward Hamfest
Kaukauna WI - Swapfest
Manitowoc WI - Lakeshore Hamfest
Oak Creek WI - SMARC Hamfest
Racine WI - Racine Hamfest
Rhineland WI - NWARC Swapfest
Rockford IL - RARC Hamfest
Rothschild WI - WVRA Hamfest
South Milwaukee, WI - SMARC Hamfest
Stevens Point, WI - CWRA Swapfest
Waukesha WI - KMRA Swapfest
Waukesha WI - Midwinter Swapfest
Dubuque IA - Hamfest

See the Swapfest page for additional information and contact persons.

IN THE NEIGHBORHOOD

DUBUQUE, IOWA Dubuque Hamfest. Contact: Carl Clark, N0KAX, 2145 Delicia Drive, Dubuque, IA 52001. (319) 557-9149.

ROCKFORD/LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (WSYI VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251); Loves Park, IL. 9:00 a.m. to noon. No new applicants after 11:00 a.m. Walkins welcome. Contact: Rusty Cordell, WB9QYV, 1823 Mulin St., Rockford, IL 61102-2619. (815) 968-0080. e-mail WB9QYV@aol.com

MINNESOTA TEST INFORMATION From The Ground Wave, Saint Paul Radio Club

Saint Paul Radio Club (SPRC)

TESTING: First Saturday of the month, 8:30 a.m.
Contact: Ed VanCleave, W0VC, (612) 636-0108 Test Site: St. Paul Technical College 235 Marshall Ave. St Paul, MN

Anoka Amateur Radio Club (AARC)

TESTING: Second Saturday of the month, 9 a.m.
Contact: Craig Johnson, AA0ZZ (612) 483-3143 Test Site: Blaine City Hall 9150 Central Ave NE Blaine, MN
Bloomington Office of Emergency Management

Bloomington Amateur Radio Club (BARC)

TESTING: Fourth Saturday of the month, 9 a.m.
Contact: Dan Royer, KE0OR (612) 888-9756 Test Site: Fire Station No. 1 94th St. & Nicollet Avenue S. Bloomington, MN

Valley Amateur Radio Club (VARC)

TESTING: Second Thursday of the month, 7 p.m.
Contact: Bill Martin, A10D (612) 432-0438 Test Site: Hayes Community Center 14601 Hayes Road Apple Valley, MN

WSYI Group

TESTING: Third Tuesday of the month, 6:30 p.m. Contact: Dave Ranney, N0AXL (612) 542-2553 Test Site: Eden Prairie Library 479 Eden Prairie Drive Eden Prairie, MN

SE Metro Area Radio Club (SEMARC)

TESTING: Third Saturday of the month, 9 a.m.
Contact: Dave Harrell, K0BTE (612) 459-8678 Test Site: Cottage Grove fire Station 8641 80th ST., S Cottage Grove, MN.

The times and places listed above are the usual time and place for each VE team. Occasionally, sessions are canceled or changed. It is a good idea to call ahead to confirm the test time and place.

This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be sent to kebneter@palacenet.net.

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Swapfest Information Line: (608) 245-8890

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July 8, 2000
(Held every July)

American Legion Park

Shepard Avenue • Oak Creek, WI

(414) 762-3235
P. O. Box 102

Extension: Ask for Verne
South Milwaukee, WI 53172

SEWFARS SWAPFEST

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SUNDAY, MARCH 12, 2000

8:00 A.M. - 2:00 P.M.

Setup Starts at 6:00 A.M.

For more information, call (414) 835-7035

LAKE SHORE HAMFEST AND COMPUTER SWAPFEST

Manitowoc County Expo

Intersection of Hwys 42-151 and I-43 on Cty Highway R

Saturday, May 13, 2000

For more information, call:

Red, N9GHE • (920) 84-3733

Dick, N9QFY • (920) 682-9264

ManCoRad Radio Club • P.O. Box 204 • Manitowoc, WI 54221-0204

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Radio, Electronic, Computer Swapfest

03/25/01

North Shore Radio Club / Box 1066 Highland Park, IL / 60035

Eau Claire Amateur Radio Club W9EAU HAMFEST Saturday, June 10, 2000

For Information Contact:

Jim Staatz KG9MV at 715-838-9108

P.O. Box 1867 Eau Claire, WI 54702-1867

kg9mv@ecol.net http://www.ecarc.org

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www.w9udu.org

Ozaukee Radio Club 22ND ANNUAL RADIO AND COMPUTER SWAPFEST Saturday, May 6, 2000

8 a.m. to 1 p.m. • Circle B Recreation Center
Intersection of Highway 60 and County I
Exams by Badger Examiners, c/o Gary Sharbuno,
5119 W. Willow Rd., Brown Deer, WI 53222
Swapfest sponsored by the Ozaukee Radio Club
1702 Holly Lane, Grafton, WI 53024

Circus City Swapfest

Sponsored by The Yellow Thunder Amateur Radio Club

Saturday August 12, 2000 • 7 am - Noon
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\$5 - At Gate
8 Foot Tables - \$5

Steve Schulze, N9UDO
(608)356-2313/356-4777
<http://members.baraboo.com/sschulze/hamfest.htm>

Bill Klinkner, N9KXX
(608)643-6908/643-6453

Red Cedar Repeater Association, Inc.

AUCTION

February 27, 2001 • 7:00 p.m.

American Legion Post 53 • 634 Water Street
Eau Claire, WI

CONTACT: Steve Hart, KA9OMC 715-665-2374
E616 810th Ave. Knapp, WI 54749

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